

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-3, 5, 6, 8, 10-14, and 21-32 are pending in the application, with claims 1, 5, 8, 10, 21, 28, and 30-31 being the independent claims. Claims 10-14 and 21 are sought to be amended. New claims 30-32 are sought to be added. This amendment is believed to introduce no new matter, and its entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Examiner Interview***

Applicants thank the Examiner for the interview conducted on March 7, 2008. The substance of the interview is summarized in the Interview Summary dated March 7, 2008.

***Withdrawn Claims***

The Office Action summary states that claims 21-29 were withdrawn from consideration. Applicants respectfully submit this statement is in error. Applicants believe that the Office Action summary was intended to state that claims 15-20 were withdrawn from consideration in accordance with Applicants' October 11, 2007 amendment seeking to cancel claims 15-20 without prejudice to or disclaimer of the subject matter therein. Applicants note that the Office Action summary further states

that claims 21-29 were in fact considered, and rejected as set forth in the Office Action.

Applicants intend that claims 21-29 remain pending and be considered.

***Rejections under 35 U.S.C. § 101***

Paragraph 2 of the Office Action rejects claims 5, 10, 13-15, and 17-20 under 35 U.S.C. § 101 as directed to non-statutory subject matter. Applicants believe the rejection of claims 5, 15, and 17-20 may be in error.

As to claim 5, the present Office Action provides no argument to Applicants' response of October 11, 2007 that claim 5 is directed to statutory subject matter under 35 U.S.C. § 101. Accordingly, Applicants respectfully request the Examiner withdraw the rejection of claim 5 as directed to non-statutory subject matter under 35 U.S.C. § 101.

With respect to claims 15 and 17-20, Applicants note they canceled these claims without prejudice or disclaimer in their response of October 11, 2007, thereby rendering the present rejection thereto moot. Accordingly, Applicants respectfully request the Examiner withdraw the rejection of claims 17-20 under 35 U.S.C. § 101 set forth in paragraph 10 of the Office Action.

Turning to claim 10, Applicants have amended claim 10 to overcome the rejection. As amended, claim 10 is directed to a "computer program product comprising a tangible computer readable storage medium, the tangible computer readable storage medium having embodied thereon computer readable program code for providing a microprocessor core including a cache controller." Applicants respectfully assert that such a computer program product having computer program code embodied on a tangible medium is statutory subject matter within the scope of 35 U.S.C. § 101. *See, In*

re Beauregard, 53 F.3d 1583 (Fed. Cir. 1995) ("The Commissioner now states 'that computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter under 35 U.S.C. Sec. 101 and must be examined under 35 U.S.C. Secs. 102 and 103.'). Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 10, and its dependent claims 13-14, under 35 U.S.C. § 101 set forth in paragraph 2 of the Office Action.

***Rejections under 35 U.S.C. § 102***

Paragraph 10 of the Office Action rejects claims 21-23 and 25-28 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,740,392 to Brennan (Brennan). For at least the following reasons, Applicants respectfully request the Examiner reconsider and withdraw the rejection.

Claim 21 recites, in part, "mapping each of a plurality of instructions to a predetermined instruction width format (PIWF) configuration." Paragraph 10 of the Office Action suggests 00H/0FH length decoders shown in Brennan Figure 5 disclose this element of claim 21. Applicants respectfully disagree.

As described in paragraph [0017] of the present specification, the PIWF is described as follows:

a format with a sufficient number of bits to provide a corresponding representation for each instruction in the plurality of instruction sets supported by a host computer system. Each instruction in the plurality of instruction sets is mapped to a PIWF configuration representing that instruction. The PIWF may itself be an instruction set (if identical to a supported instruction set) or it may be an intermediate instruction representation (if different from all the supported instruction sets). In either case, a decoder is required to decode the PIWF for execution by a processor core.

Unlike the PIWF, which is an instruction or a representation thereof that requires decoding for execution by a processor, the run length decoders disclosed in Brennan are used to determine an instruction length. (*See* Brennan at col. 7, lines 43-44, "The length decoder\_0 decodes the three selected bytes to generate a length value L0.") Applicants respectfully submit the determined instruction length is not subsequently decoded for execution by a processor core as recited in claim 21. Therefore, Applicants respectfully submit Brennan does not disclose each and every element of claim 21. Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claim 21 and its dependent claims 22-23, and 25-27 set forth in paragraph 10 of the Office Action.

Independent claim 28 recites "mapping each of a plurality of instructions to a predetermined instruction width format (PIWF) configuration." Applicants respectfully submit that, as explained above, Brennan does not disclose this feature recited in claim 28. Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claim 28 set forth in paragraph 10 of the Office Action.

***Rejections under 35 U.S.C. § 103***

Paragraph 4 of the Office Action rejects claims 1-3, 5, 6, 8, and 10-14 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Brennan in view of U.S. Patent No. 6,442,674 to Lee (Lee). For at least the following reasons, Applicants respectfully request the Examiner reconsider and withdraw the rejection.

Claim 1 recites, in part, "each mapper for mapping an instruction of said instruction set to a predetermined instruction width format (PIWF) configuration." As

explained above, Brennan does not disclose "mapping an instruction of said instruction set to a predetermined instruction width format (PIWF) configuration."

Applicants respectfully submit that the disclosure of Lee is not sufficient to overcome the deficiencies of Brennan in this respect with respect to claim 1. Consequently, Applicants respectfully assert the combination of Brennan in view of Lee does not render claim 1 invalid as obvious over the proposed combination. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 1, and its dependent claims 2-3, under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Lee set forth in paragraph 4 of the Office Action.

Claim 5 recites "mapping each instruction of said instruction set to a corresponding PIWF configuration." Applicants respectfully assert that, as explained above, Brennan does not teach or suggest this feature of the invention recited in claim 5.

Applicants respectfully submit that the disclosure of Lee is not sufficient to overcome the deficiencies of Brennan in this respect with respect to claim 5. Consequently, Applicants respectfully assert the combination of Brennan in view of Lee does not render claim 5 invalid as obvious over the proposed combination. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 5, and its dependent claim 6, under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Lee set forth in paragraph 4 of the Office Action.

Claim 8 recites "a plurality of mappers for mapping a plurality of instructions of an instruction set to predetermined instruction width format (PIWF) configurations." Applicants respectfully assert that, as explained above, Brennan does not teach or suggest this feature of the invention recited in claim 8.

Applicants respectfully submit that the disclosure of Lee is not sufficient to overcome the deficiencies of Brennan in this respect with respect to claim 8. Consequently, Applicants respectfully assert the combination of Brennan in view of Lee does not render claim 5 invalid as obvious over the proposed combination. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Lee set forth in paragraph 4 of the Office Action.

Claim 10 recites "a plurality of mappers for receiving instructions of an instruction set, each mapper for mapping an instruction of said instruction set to a predetermined instruction width format (PIWF)." Applicants respectfully assert that, as explained above, Brennan does not teach or suggest this feature of the invention recited in claim 10.

Applicants respectfully submit that the disclosure of Lee is not sufficient to overcome the deficiencies of Brennan in this respect with respect to claim 8. Consequently, Applicants respectfully assert the combination of Brennan in view of Lee does not render claim 10 invalid as obvious over the proposed combination. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 10, and its dependent claims 11-14, under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Lee set forth in paragraph 4 of the Office Action.

Paragraph 14 of the Office Action rejects claims 24 and 29 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Brennan in view of Lee. For at least the

following reasons, Applicants respectfully request the Examiner reconsider and withdraw the rejection.

Claim 24 depends ultimately from independent claim 21, and claim 29 depends ultimately from independent claim 28. As explained above, claims 21 and 28 are believed patentable over the proposed combination. Consequently, Applicants respectfully submit that claim 24, which depends from claim 21 and claim 29, which depends from claims 28 are patentable over the proposed combination as well. Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claims 24 and 29 under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Lee set forth in paragraph 14 of the Office Action.

***New Claims 30-32***

Applicants respectfully request the Examiner consider and allow claims 30-32.

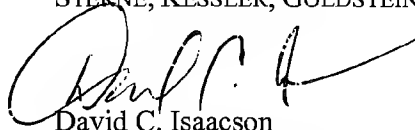
***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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